

Dialysis and Triptotricha.

BY S. W. WILLISTON.

In the *Insecta Saundersiana*, p. 4, Walker described a genus of diptera under the name of *Dialysis*, referring it to the Xylophagidæ. He based the genus upon a specimen which he had previously referred doubtfully to *Xylophagus americanus* Wied.* From the description, Loew was in doubt† as to the location in the Xylophagidæ. In 1879, Bigot recognized the genus and described a species (*D. dispar*) of it from California.‡ Later Osten Sacken examined Walker's type specimen and referred it to the genus *Triptotricha*,§ but did not accept Walker's name, contending that the genus had never been recognizably described. Rather reluctantly I accepted this rejection of the name in my Synopsis of the genera of Leptidæ,|| though the synonymy was recognized.

In 1889 Bergroth described** a new species of the genus from the United States, under the name *Dialysis disparilis*, led thereto by his well-known views regarding the rigidity of zoological nomenclature. He urged that Bigot had been able to recognize the genus, though he had erred in locating it among the Xylophagidæ.

Until recently all the species known to me have two spurs on the front tibiæ, and I have so defined *Triptotricha* in the generic synopses given by me, overlooking the fact, to which my attention has recently been called by Prof. Aldrich, that the genus *Triptotricha* Loew was said by its author to have *one* tibial spur†† (“Die von mir erichtete Gattung *Triptotricha* gehört, wegen der Anwesenheit eines starken Sporns an den Vorderschienen,” etc.). In his original diagnosis of the genus‡‡ he makes no mention of this character, and it so happens that the type species of the genus has *two* anterior tibial spurs, as has been shown by Townsend.§§ This last mentioned author also shows that one of the species placed by Loew in the genus (*T. rufithorax* Say) has but the one spur.

*List, etc., I, 128.

†Menog., I, 16.

‡An. Soc. Ent. Fr. 1879.

§Berl. Ent. Zeit., XXVII, 295.

||Entom. Amer., April, 1885.

**Wien. Ent. Zeit., p. 296.

††Berl. Ent. Zeit., XVIII, 380, 1874

‡‡Centur., X, 15.

§§Proc. Wash. Ent. Soc., II, 118.

In Entom. Amer., II, p. 106, I described a new genus of Leptidæ under the name *Agnotomyia*, based upon the presence of but four posterior cells in the wing and of but one anterior tibial spur. The species upon which the genus was founded was the long-lost *Lomatia elongata* of Wiedemann, which had previously been placed among the Bombyliidæ. Another species agreeing in these characters was known to me at the time, but I did not describe it. With the knowledge of the fact that *T. rufithorax* has but a single spur, and the vein of the wing separating the fourth and fifth posterior cells often incomplete, Townsend rightly came to the conclusion that the two genera were less certainly distinct than had seemed to be the case.

Within the past few months, Prof. Aldrich has very kindly submitted to me another species with a single spur and with five posterior cells. Wishing to ascertain further in regard to the type of *Dialysis*, I wrote to Mr. Austen of the British Museum for information especially concerning this character. Mr. Austen, with great kindness, has written me the following in reply: "There is only *one* spur on the front tibiæ of the type specimen of Walker's *Dialysis dissimilis*. I am astonished to find, however, that there are *only four posterior cells* in the wing, as seen in the accompanying drawing.



Fig 1.

This extraordinary venation seems to have escaped the notice of Baron Osten Sacken, when he examined the specimen. The two wings are exactly alike and there is no stump or other trace of the missing vein in either of them. In other respects the specimen is a Leptid and agrees generally with the description of *Triptotricha fasciventris* Loew. The abdomen agrees absolutely with Loew's description. In other respects there are the following differences: Third joint of the antennæ and the arista blackish; I cannot detect any trace of black hairs on the first two joints; thorax with a reddish brown median stripe, extending to the base of the scutellum, but not quite reaching the anterior margin; humeri shimmering whitish when viewed from above; front and middle tarsi uniformly brown, first joint not paler; first and second joints of hind tarsi yellowish, but brown at the tips.

Length of the body 10 millim.; of the wings $8\frac{1}{3}$ millim. One specimen."

It is very fortunate for Dipterology that so able a student as Mr. Austen is engaged in the study of the British Museum diptera. We can now confidently expect to learn much that will be of value concerning Mr. Walker's unrecognizable species and genera.

This much results from the above facts: The genus *Agnotomyia* is absolutely identical with *Dialysis* and must be abandoned. Is the presence of but four posterior cells a good generic character? I can not say. Genera are founded in allied families on the same or similar grounds, and I have yet to see a specimen of *Dialysis* (in the sense of *Agnotomyia*) in which the character is variable. Still, from the fact that there are other species with the same tibial character and four posterior cells, and especially because there seems to be a tendency to variation in the venation of *Triptotricha*, I am inclined to give up this character, and base the genus for the present on the tibial character alone. With this conclusion, both *Dialysis* and *Triptotricha* may be retained. If *Dialysis* is maintained upon the wing character, then I believe it would be justifiable to place *D. rufithorax* and the following new species in a new genus.

The following species belong to the genus *Triptotricha*:

T. disparilis Bergroth. Wien. Ent. Zeit., 1889, 296; and 1892, 162.

T. lauta Loew, Centur., X, 15.

The following in *Dialysis*:

D. dissimilis Walker, Ins. Saund., 4.

D. rufithorax Say, J. Acad. Phil., III, 36; Compl. Wr., II, 56.

D. elongata Say, Journ. Acad. Phil., III, 41; Compl. Wr., II, 58 (*Stygia*); *Anthrax*, *Lomatia* Wiedemann; *Agnotomyia* Williston.

D. aldrichi Williston, nov., infra.

The following species are indeterminable at present:

D. dispar Bigot, Ann. Soc. Ent. Fr., 1889.

T. discolor Loew, Berl. Ent. Zeit., 1874, 379.

T. fasciventris Loew, l. c., 380.

Dialysis aldrichi n. sp.

Male. Eyes separated by linear space, which, with the vertical triangle, is black; frontal triangle with yellow pubescence. First joint of the antennæ blackish; second joint reddish yellow; third joint and the arista black; first two joints with black hair. Proboscis yellowish pile; humeri yellowish dusted. Pleuræ shining black, the upper part of the meso- and metasternum white. Halteres yellow, the knob blackish. First four segments of the abdomen yellow with a black anterior cross-band, expanded triangularly in the middle to, or nearly to, the hind margin; remaining segments black with the

hind angles yellow. Legs yellow, all the tarsi and the tip of all the tibiæ black; hind tibiæ brownish; tip of hind femora brown or blackish; coxæ in part yellow. Wings tinged with blackish, the immediate base, the costal cell and the outer part of the subcostal and marginal cells yellow; fourth posterior cell usually short-petiolate at the base. Length 9-10 millim.

Four specimens, Craig mountains, Idaho, J. M. Aldrich.